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(54) Title: HUMAN GENES AND GENE EXPRESSION PRODUCTS V

## (57) Abstract

This invention relates to novel human polynucleotides and variants thereof, their encoded polypeptides and variants thereof, to genes corresponding to these polynucleotides and to proteins expressed by the genes. The invention also relates to diagnostic and therapeutic agents employing such novel human polynucleotides, their corresponding genes or gene products, e.g., these genes and proteins, including probes, antisense constructs, and antibodies.

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We Claim:

1. A library of polynucleotides, the library comprising the sequence information of at least one of SEQ ID NOS:1-2702.

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2. The library of claim 1, wherein the library is provided on a nucleic acid array.

3. The library of claim 1, wherein the library is provided in a computer-readable format.

10 4. The library of claim 1, wherein the library comprises a polynucleotide corresponding to a gene differentially expressed in a cancer cell of high metastatic potential relative to a control cell, wherein the control cell is a normal cell or a cell of low metastatic potential, and wherein the sequence is selected from the group consisting of SEQ ID NOS:1213, 1538, 1466, 1356, 1383, 1158, 441, 1338, 1426, 1547, 1313, 841, 1534, 1503, 829, 1408, 1447, 1389, 356, 1492, 1543, 799, 1437, 1251, 972, 1482, 1299, 109, 1558, 1355, 1548, 250, 919, 358, 1525, 1157, 150, 651, 1298, 15 57, 625, 1322, 36, 621, 215, 561, 247, 199, 998, 502, 1382, 1181, 1309, 1157, 1260, 1185, 1525, 248, 87, 698, 57, 924, 1249.

20 5. The library of claim 1, wherein the library comprises a polynucleotide corresponding to a gene differentially expressed in a cancer cell of low metastatic potential relative to a control cell, wherein the control cell is a normal cell or a cell of high metastatic potential, and wherein the sequence is selected from the group consisting of SEQ ID NOS:248, 726, 14, 699, 763, 20, 79, 715, 991, 1199, 707, 1128, 891, 1146, 731, 1518, 340, 949, 1247, 1185, 924, 822, 728, 341, 1527, 698, 949, 744, 973, 1268, 1114, 1032, 109, 973, 91, 982, 1267, 93, 1556, 1251, 1206, 812, 1254, 1220, 25 766, 1156, 1007, 981, 762, 876, 1234, 1183, 1044, 785, 1069, 770, 778, 792, 822, 1258, 1224, 984, 841, 339, 1213, 1201, 1192.

30 6. An isolated polynucleotide comprising a nucleotide sequence having at least 90% sequence identity to an identifying sequence of SEQ ID NOS:1-2707 or a degenerate variant or fragment thereof.

7. A recombinant host cell containing the polynucleotide of claim 6.

8. An isolated polypeptide encoded by the polynucleotide of claim 6.

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9. An antibody that specifically binds a polypeptide of claim 8.

10. A vector comprising the polynucleotide of claim 6.

11. A polynucleotide comprising the nucleotide sequence of an insert contained in a clone deposited as ATCC accession number xx, xx, xx, xx, xx, xx, xx, or xx.

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12. A method of detecting differentially expressed genes correlated with a cancerous state of a mammalian cell, the method comprising the step of:

detecting at least one differentially expressed gene product in a test sample derived from a cell suspected of being cancerous, where the gene product is encoded by a gene corresponding to a sequence of at least one of SEQ ID NOS: 1213, 1538, 1466, 1356, 1383, 1158, 441, 1338, 1426, 1547, 1313, 841, 1534, 1503, 829, 1408, 1447, 1389, 356, 1492, 1543, 799, 1437, 1251, 972, 1482, 1299, 109, 1558, 1355, 1548, 250, 919, 358, 1525, 1157, 150, 651, 1298, 57, 625, 1322, 36, 621, 215, 561, 247, 199, 998, 502, 1382, 1181, 1309, 1157, 1260, 1185, 1525, 248, 87, 698, 57, 924, 1249, 248, 726, 14, 699, 763, 20, 79, 715, 991, 1199, 707, 1128, 891, 1146, 731, 1518, 340, 949, 1247, 1185, 924, 822, 728, 341, 1527, 698, 949, 744, 973, 1268, 1114, 1032, 109, 973, 91, 982, 1267, 93, 1556, 1251, 1206, 812, 1254, 1220, 766, 1156, 1007, 981, 762, 876, 1234, 1183, 1044, 785, 1069, 770, 778, 792, 822, 1258, 1224, 984, 841, 339, 1213, 1201, 1192

15 wherein detection of the differentially expressed gene product is correlated with a cancerous state of the cell from which the test sample was derived.

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